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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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AUG 22 1997

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Advanced Television Systems) MM Docket No. 87-268
and Their Impact upon the)
Existing Television Broadcast)
Service)

To: The Commission

SUPPLEMENT TO PETITION FOR RECONSIDERATION

Sierra Broadcasting Company ("Sierra"), the licensee of Television Station KRNVT (TV), Reno, Nevada, by its attorneys, respectfully supplements its Petition filed June 13, 1997 seeking reconsideration of the Sixth Report and Order (FCC 97-115) ("Sixth R&O") in the above-referenced Digital Television proceeding.¹ In its Petition, Sierra invited the Commission's attention to the unfortunate loss of service that would result from the DTV allocation given to KRNVT (TV), a loss so severe that it ranked as the single greatest service loss of any station in the nation. As Sierra herein demonstrates, however, there

¹ On July 2, 1997, the Commission established August 22, 1997 as the deadline for supplements to Petitions for Reconsideration, following release of Office of Engineering and Technology Bulletin No. 69. See Order, DA 97-1377, July 2, 1997, at ¶ 7.

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appears to be a solution that easily can accommodate both the needs of KARNV(TV)'s viewing public and the Commission's DTV allocation goals.

I. Background

KARNV(TV) operates on NTSC Channel 4 and is the NBC affiliate for the Reno, Nevada market. As stated in Sierra's June 13th Petition, KARNV(TV) was allotted DTV Channel 33 in the Commission's Table of DTV Allotments adopted in the Sixth R&O. This allocation would give KARNV(TV) as a DTV station, coverage of a mere 59.4 percent of the area it currently serves as an NTSC station. Further, in terms of population receiving NTSC Grade B service, it would result in only 71 percent replication. Some 110,000 persons in the station's current viewership would lose Grade B service.

Thus, the DTV Table effectively awarded KARNV(TV) the dubious distinction of the worst replication of any television station in the country. More importantly, however, the new allocation also represents a threatened loss of service to KARNV(TV)'s viewing public and a perhaps insurmountable competitive disadvantage to KARNV(TV) within its market. As such, it also is inconsistent with the Commission's stated goals of affording broadcasters "the ability to reach the audiences that they now serve and [providing

viewers] access to the stations that they now can receive over the air." Sixth R&O at ¶ 29.

II. Sierra's Proposal

As indicated in the Engineering Statement of D.L. Markley and Associates, Inc. (attached hereto), however, there appears to be a channel that would provide KRNVT (TV) with a replication of service more consistent with the Commission's stated policies. Thus, DTV Channel 9 can be substituted for DTV Channel 33 at Reno with a minimum of complication. Sierra would propose to use Channel 9 at a new site at Slide Mountain.

There are two issues raised by Sierra's proposal: First, KOLO-TV, Reno, operates on NTSC Channel 8, first adjacent to Sierra's proposed channel. The relevant Commission spacing requirements mandate that facilities for Channels 8 and 9 be located within 17.7 km of each other. To meet that standard, Sierra proposes that the coordinates for DTV Channel 9 in Reno be changed to a point on a proposed community antenna site on Slide Mountain, near Reno. As indicated in the attached Engineering Statement, negotiations are already underway to develop that site.

The second issue relates to a 22 km short spacing with KFSN-TV (DTV Channel 9; NTSC Channel 30), Fresno, California. As is

apparent from the preliminary profiles and related materials attached to the Engineering Statement, however, formidable terrain shielding should negate any potential for actual interference between the two stations. (Analysis of both the co-channel interference potential and more specific data as to replication of service will be developed further in materials to be submitted in the near future.)²

Thus, both interference concerns can be resolved simply, thereby permitting the use of DTV Channel 9 and correcting the severe service loss that otherwise would result from the Commission's initial allocation of DTV Channel 33.

III. Conclusion

In the Commission's Sixth R&O, the viewing public of the Reno area was threatened with a significant, unparalleled loss of service upon which it has depended for 35 years. Fortunately, however, this threat easily can be reversed, to the benefit of KRNV(TV)'s audience.

² To the extent it is deemed necessary, Sierra hereby requests an additional 14 days in which to prepare the necessary additional supporting engineering data.

Accordingly, Sierra requests that the Commission reconsider its allocation of DTV Channel 33 to KRNV(TV) and replace it with DTV Channel 9.

Respectfully submitted,

SIERRA BROADCASTING COMPANY

By



James R. Bayes

Jerry V. Haines

of

WILEY, REIN & FIELDING

1776 K Street, N.W.

Washington, D.C. 20006

Its Attorneys

Dated: August 22, 1997

ENGINEERING STATEMENT

The following engineering statement has been prepared for Sierra Broadcasting Company, licensee of Television Station KRNV at Reno, Nevada, and is in support of their Supplement to the Petition for Reconsideration of the Commission's Sixth Report and Order.

In the Sixth Report & Order, the Commission allotted channel 33 to Reno, Nevada to be paired with channel 4 which is used by KRNV. A study of both the DTV and the analog Table of Allotments has revealed that an alternative does exist to the use of channel 33 which would more efficiently serve the Reno market. Therefore, it is requested that VHF channel 9 be allotted to Reno to be used by KRNV as its digital television allotment.

A study of the spacing to other analog and DTV allotments reveals that the closest station or allotment on either set of tables on VHF channel 9 is the DTV allotment on channel 9 for Fresno, CA to be paired with channel 30 for KFSN-TV. The spacing involved for the use of channel 9 as a DTV station at Reno is specified in Section 73.623(d)(1) as 273.6 kilometers between VHF DTV allotments in Zone II for a new allotment without an interference study. The proposed allotment of channel 9 to Reno would be short-spaced by 22

kilometers at the site coordinates listed below. A waiver of that short-spacing is requested.

To support that request, it is noted that the Sierra Nevada Range of mountains lies on the direct path between Reno and Fresno. This range of mountains contains peaks which are more than 4000 feet higher than Reno and more than 9,000 feet higher than Fresno. It is apparent that the use of channel 9 in Reno will cause no interference to a Fresno station.

In addition to the Fresno allocation, the spacing requirements limit the Reno allocation on channel 9 to within 17.7 km. of KOLO-TV, Reno, Nevada, whose NTSC channel is the first adjacent channel 8. Therefore, it is requested that the coordinates for the Reno allocation be changed to 39° 18' 45" N. 119° 53' 00" W. The proposed coordinates are within one kilometer of the KOLO-TV site. This will accommodate the plans of the petitioner and others to establish a community antenna site on Slide Mountain which is South of the city of Reno. Negotiations with the U. S. Forest Service are currently underway to lead to the development of that site. The Forest Service has responded positively to that proposal and a consortium of the area television stations is being formed to finance the development.

The allotment of channel 33 at Reno would have resulted in a DTV/NTSC area match of only 59.4% which would have been the lowest of any station listed in the sixth report and order. It is respectfully submitted that the use of channel 9 will allow a considerably better match to be accomplished. A study to determine the actual percentage of match is being performed using OST Bulletin No. 69 in accordance with the Commission's criteria. A copy of that study will be filed with the Commission as an amendment to this Supplement. That same study will serve to demonstrate further that no interference would be caused by the proposed channel 9 allocation to the co-channel Fresno allocation. If any such interference were found to be predicted, the petitioner agrees to utilize a directional transmitting antenna system to reduce the signal transmitted toward Fresno to reduce that interference to be equal to or less than that from a fully spaced DTV station.

The preceding statement was prepared by me or under my direction and is true and correct to the best of my knowledge and belief.

Date: Aug 26, 1987
Donald L. Markley, P.E.

EXHIBITS

The attached exhibits demonstrate the terrain from the proposed Channel 9 DTV site for KRNK across an arc centered on the Fresno, CA DTV site. Of most significance is the fact that the excess loss terms range from 40.8 dB. to 78.5 dB. over these paths.

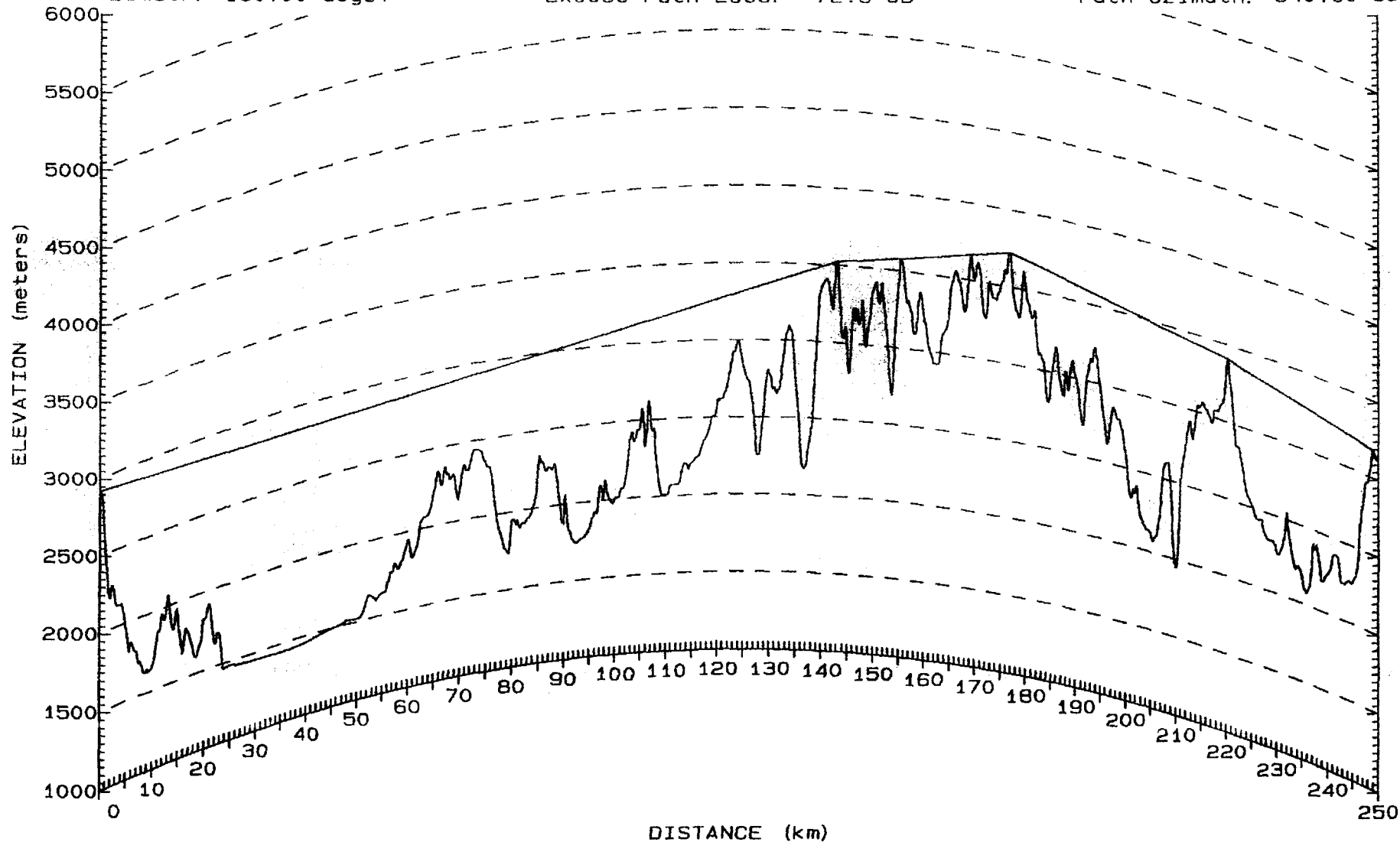
The final two plots show the predicted service areas for both KRNK and KFSN-TV. Those plots were determined utilizing the standard FCC method. It should be realized that the signal strengths toward Fresno from the KRNK site will be reduced from the FCC method by approximately the excess loss terms from the path plots. It is apparent that there will be no appreciable signal in the Fresno area from the proposed KRNK.

As an example, along the direct path, it would appear that the service contours would overlap. However, as a result of the additional loss caused by the mountains, the signal at the KFSN-TV contour would actually be more than 60 dB. less than the desired signal. It is obvious that no interference would be caused to KFSN-TV by a channel 9 facility at the requested coordinates.

Site: PROPOSED CH. 9 DTV
N 39 18 45 W 119 53 0
Ant. Elev. (AMSL): 2925.0 m
Path azimuth: 160.00 degs.

Frequency: 189.0 MHz
Path Length: 250.0 km
Total Path Loss: 198.4 dB
Excess Path Loss: 72.5 dB

Site: 160 Degree Radial
N 37 11 42 W 118 55 4
Ant. Elev. (AMSL): 3122.0 m
Path azimuth: 340.60 degs.



K factor: 1.333
Fresnel Zone: .60
3 Second Database - WGS 72

D. L. Markley & Assoc. Inc
2104 West Moss Avenue
Peoria, IL 61604

Sierra Broadcasting Co.
Reno, Nevada

CH. 9 PATH PLOT

DTV INTERFERENCE STUDY

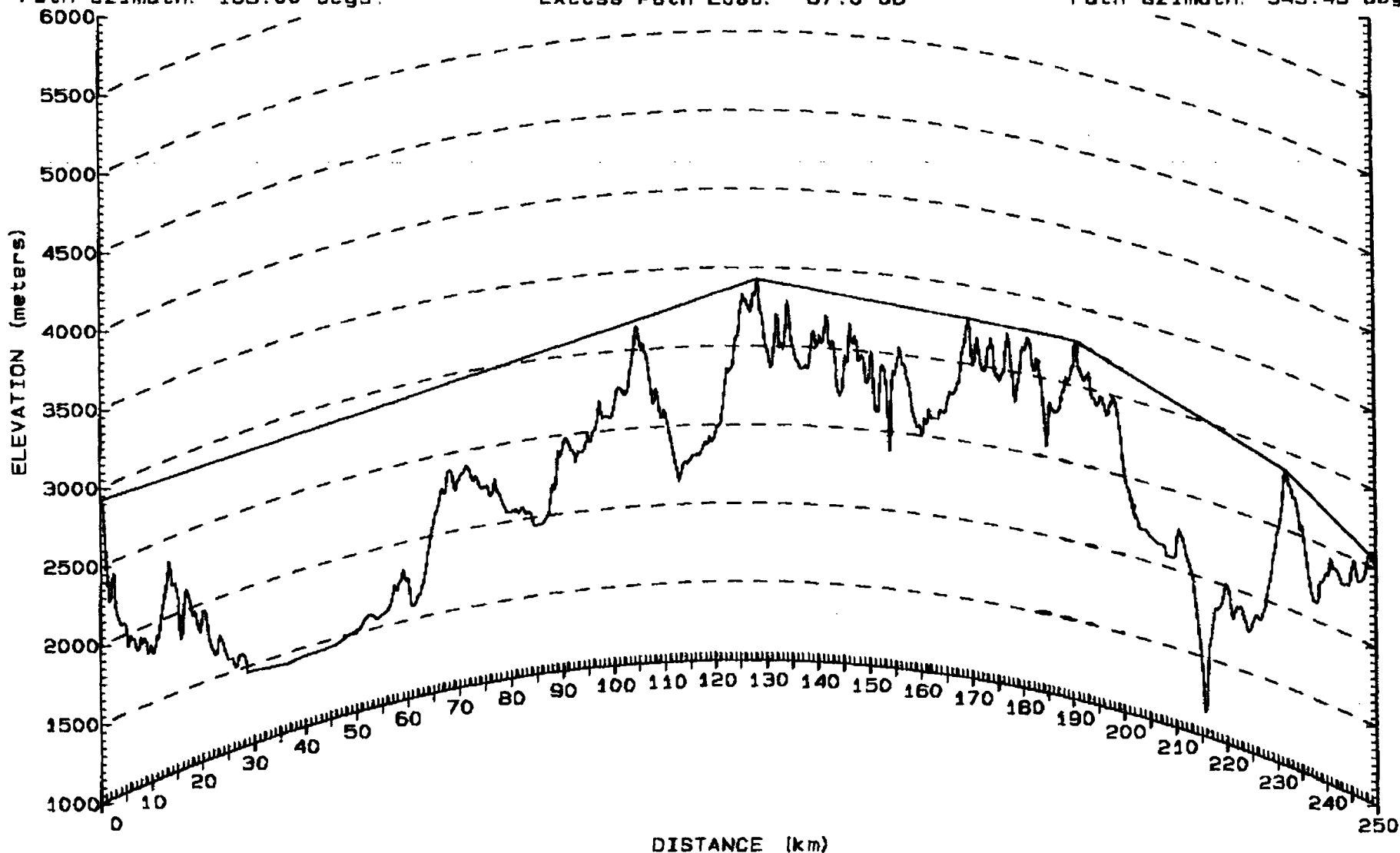
August, 1997

Exhibit 5

Site: PROPOSED CH. 9 DTV
 N 39 18 45 W 119 53 0
 Ant. Elev. (AMSL): 2925.0 m
 Path azimuth: 165.00 degs.

Frequency: 189.0 MHz
 Path Length: 250.0 km
 Total Path Loss: 212.9 dB
 Excess Path Loss: 87.0 dB

Site: 165 Degree Radial
 N 37 8 16 W 119 9 12
 Ant. Elev. (AMSL): 2502.5 m
 Path azimuth: 345.45 degs



K factor: 1.333
 Fresnel Zone: .60
 3 Second Database - WGS 72

D. L. Markley & Assoc. Inc
 2104 West Moss Avenue
 Peoria, IL 61604

Sierra Broadcasting Co.
 Reno, Nevada

CH. 9 PATH PLOT

DTV INTERFERENCE STUDY

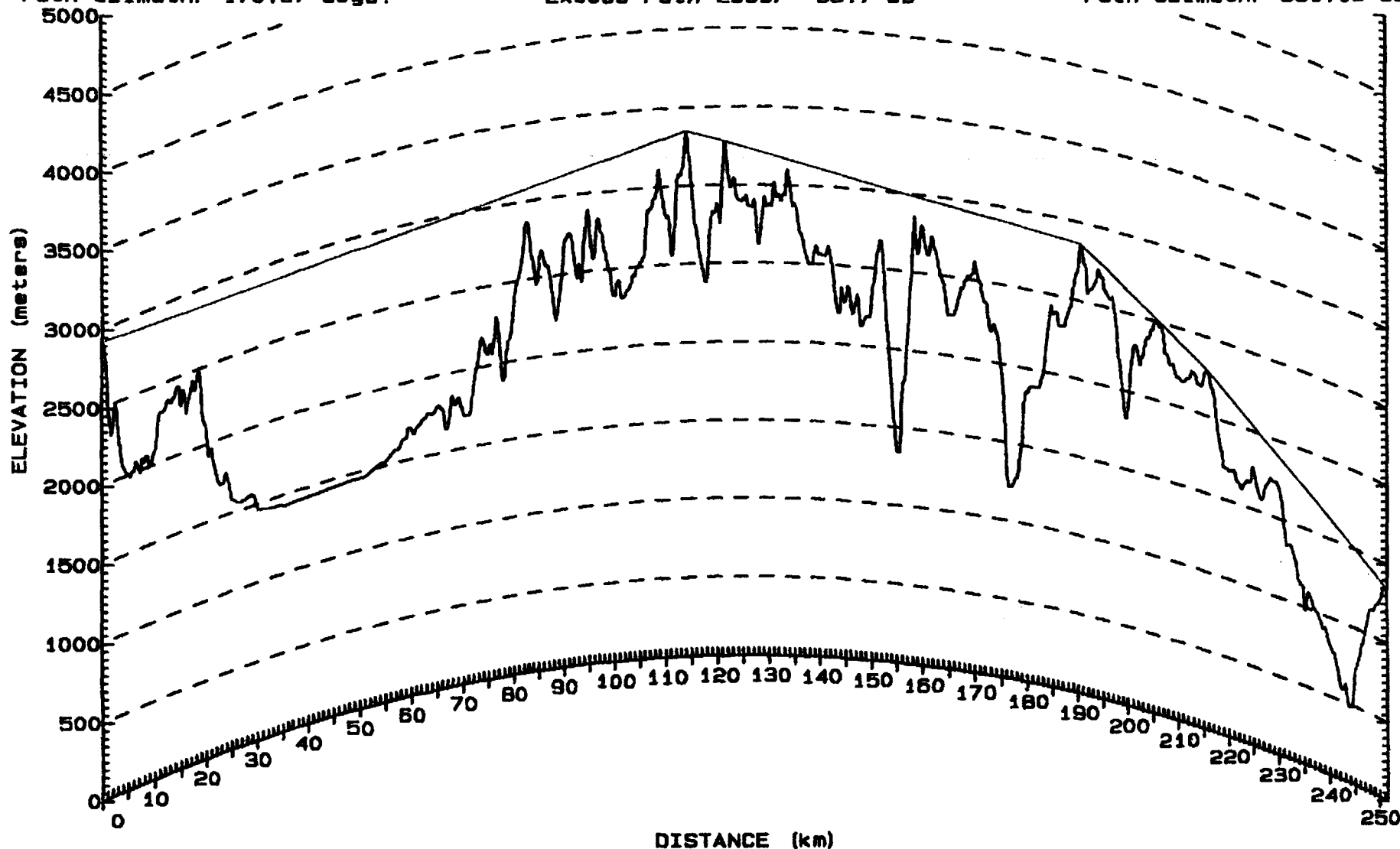
August, 1997

Exhibit 7

Site: Proposed Ch. 9 DTV
 N 39 18 45 W 119 53 0
 Ant. Elev. (AMSL): 2925.0 m
 Path azimuth: 170.87 degs.

Frequency: 189.0 MHz
 Path Length: 251.6 km
 Total Path Loss: 189.7 dB
 Excess Path Loss: 63.7 dB

Site: Fresno Ch. 9 DTV
 N 37 4 38 W 119 25 0
 Ant. Elev. (AMSL): 1341.5 m
 Path azimuth: 351.15 degs.



K factor: 1.333
 Fresnel Zone: .60
 3 Second Database - WGS 72

D. L. Markley & Assoc. Inc
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 Reno, Nevada

Ch. 9 Path Plot

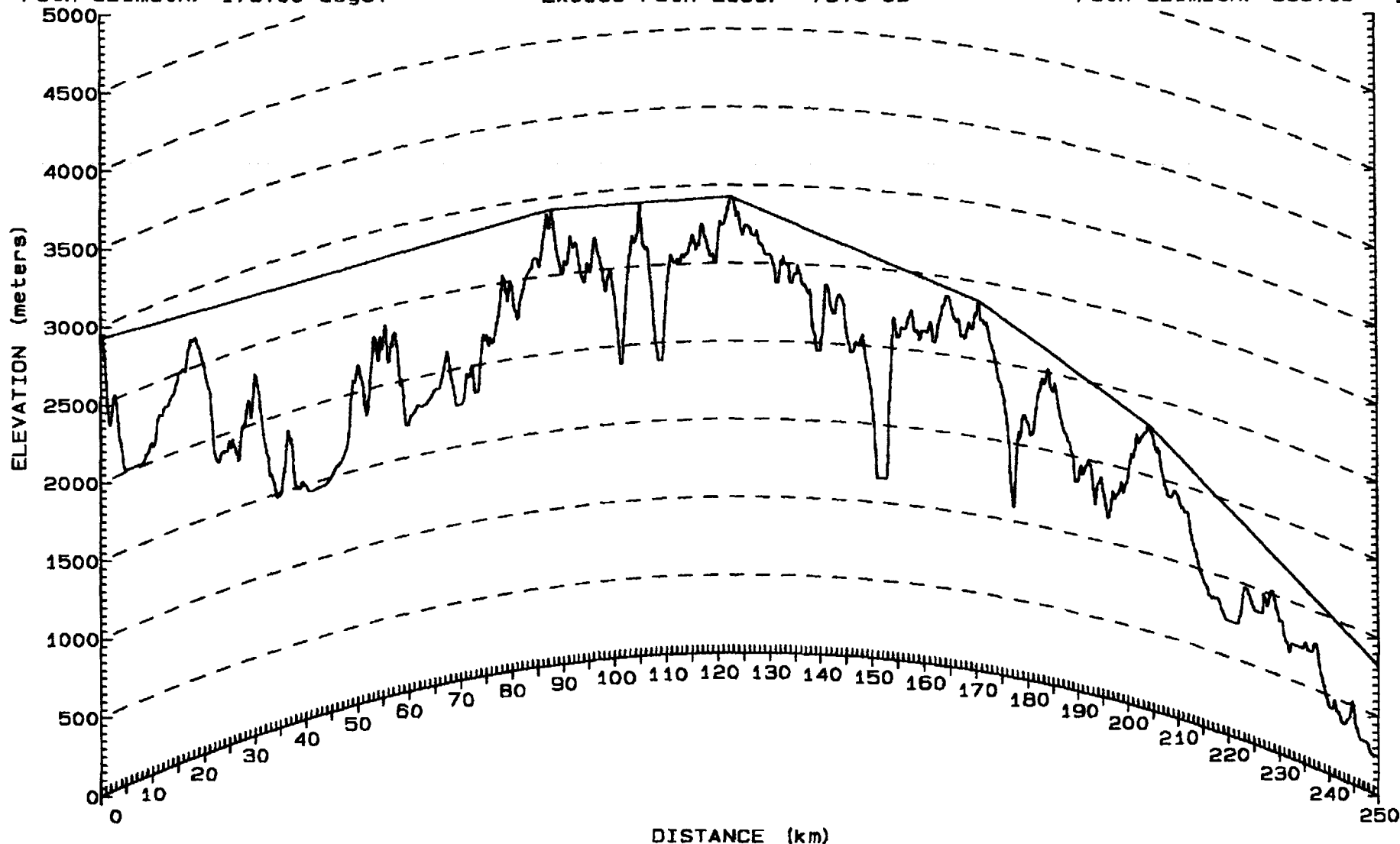
DTV Interference Study

August, 1997

Site: PROPOSED CH. 9 DTV
 N 39 18 45 W 119 53 0
 Ant. Elev. (AMSL): 2925.0 m
 Path azimuth: 175.00 degs.

Frequency: 189.0 MHz
 Path Length: 250.0 km
 Total Path Loss: 204.5 dB
 Excess Path Loss: 78.5 dB

Site: 175 DEG. RADIAL
 N 37 4 19 W 119 38 16
 Ant. Elev. (AMSL): 824.4 m
 Path azimuth: 355.15 degs.



K factor: 1.333
 Fresnel Zone: .60
 3 Second Database - WGS 72

D. L. Markley & Assoc. Inc.
 2104 West Moss Avenue
 Peoria, IL 61604

Sierra Broadcasting Co.
 Reno, Nevada

CH. 9 PATH PLOT

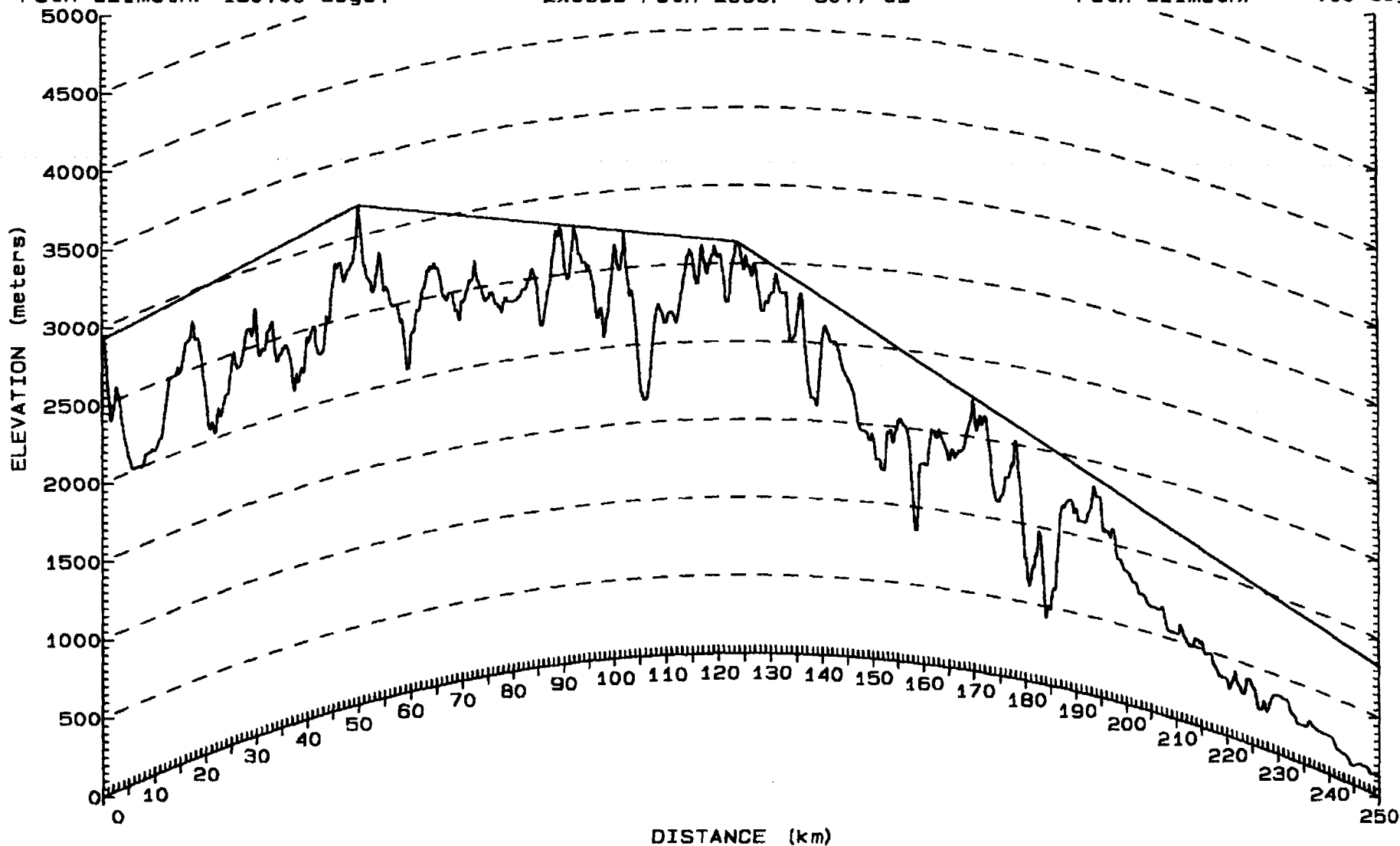
DTV INTERFERENCE STUDY

August, 1997

Site: PROPOSED CH. 9 DTV
 N 39 18 45 W 119 53 0
 Ant. Elev. (AMSL): 2925.0 m
 Path azimuth: 180.00 degs.

Frequency: 189.0 MHz
 Path Length: 250.0 km
 Total Path Loss: 176.6 dB
 Excess Path Loss: 50.7 dB

Site: 180 Deg. Radial
 N 37 3 49 W 119 53 0
 Ant. Elev. (AMSL): 824.4 m
 Path azimuth: .00 degs.



K factor: 1.333
 Fresnel Zone: .60
 3 Second Database - WGS 72

D. L. Markley & Assoc. Inc
 2104 West Moss Avenue
 Peoria, IL 61604

Sierra Broadcasting Co.
 Reno, Nevada

CH. 9 PATH PLOT

DTV INTERFERENCE STUDY

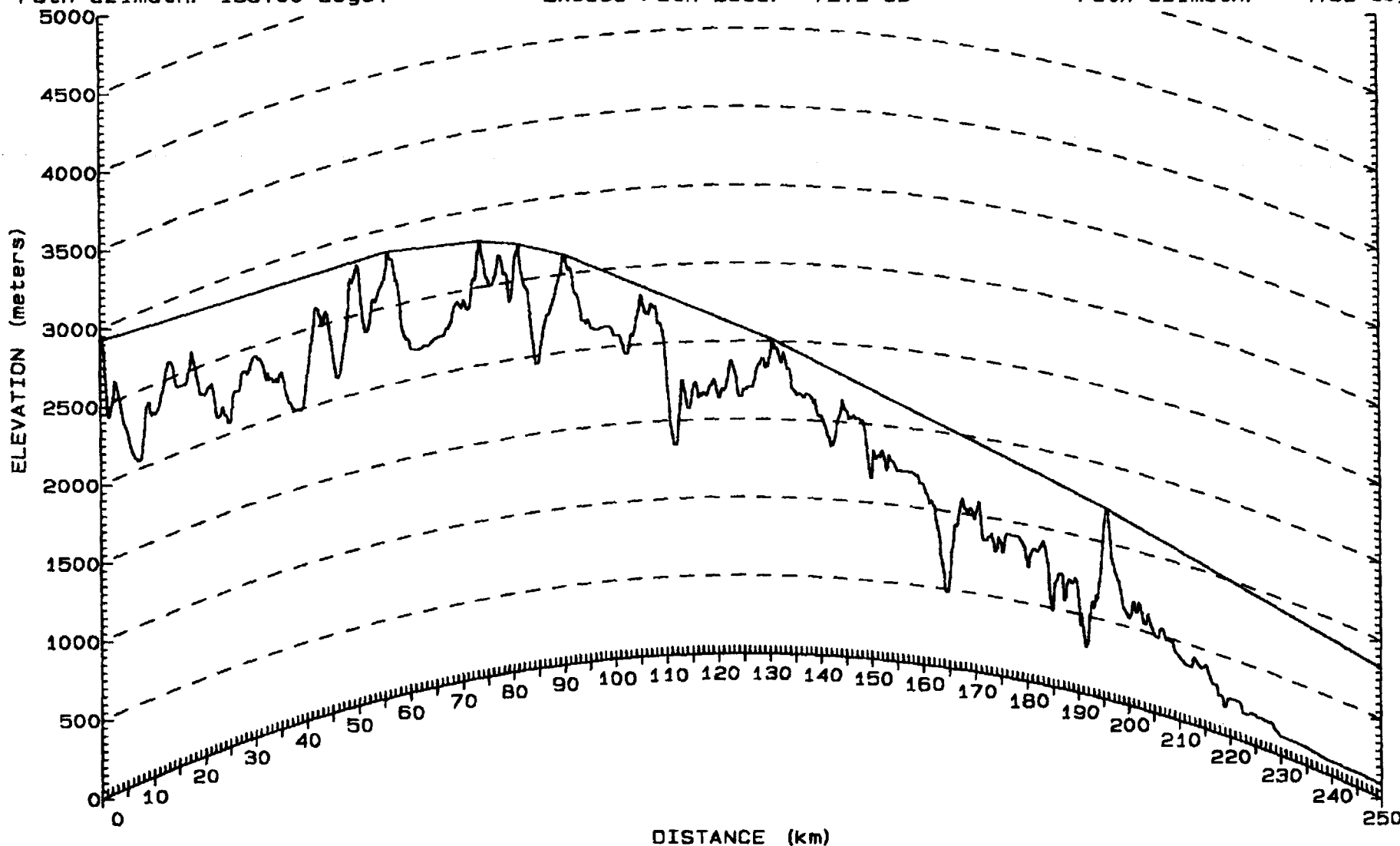
August, 1997

Exhibit 2.

Site: PROPOSED CH. 9 DTV
 N 39 18 45 W 119 53 0
 Ant. Elev. (AMSL): 2925.0 m
 Path azimuth: 185.00 degs.

Frequency: 189.0 MHz
 Path Length: 250.0 km
 Total Path Loss: 198.1 dB
 Excess Path Loss: 72.2 dB

Site: 185 Degree Radial
 N 37 4 19 W 120 7 44
 Ant. Elev. (AMSL): 824.4 m
 Path azimuth: 4.85 degs.



K factor: 1.333
 Fresnel Zone: .60
 3 Second Database - WGS 72

D. L. Markley & Assoc. Inc
 2104 West Moss Avenue
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Sierra Broadcasting Co.
 Reno, Nevada

CH. 9 PATH PLOT

DTV INTERFERENCE STUDY

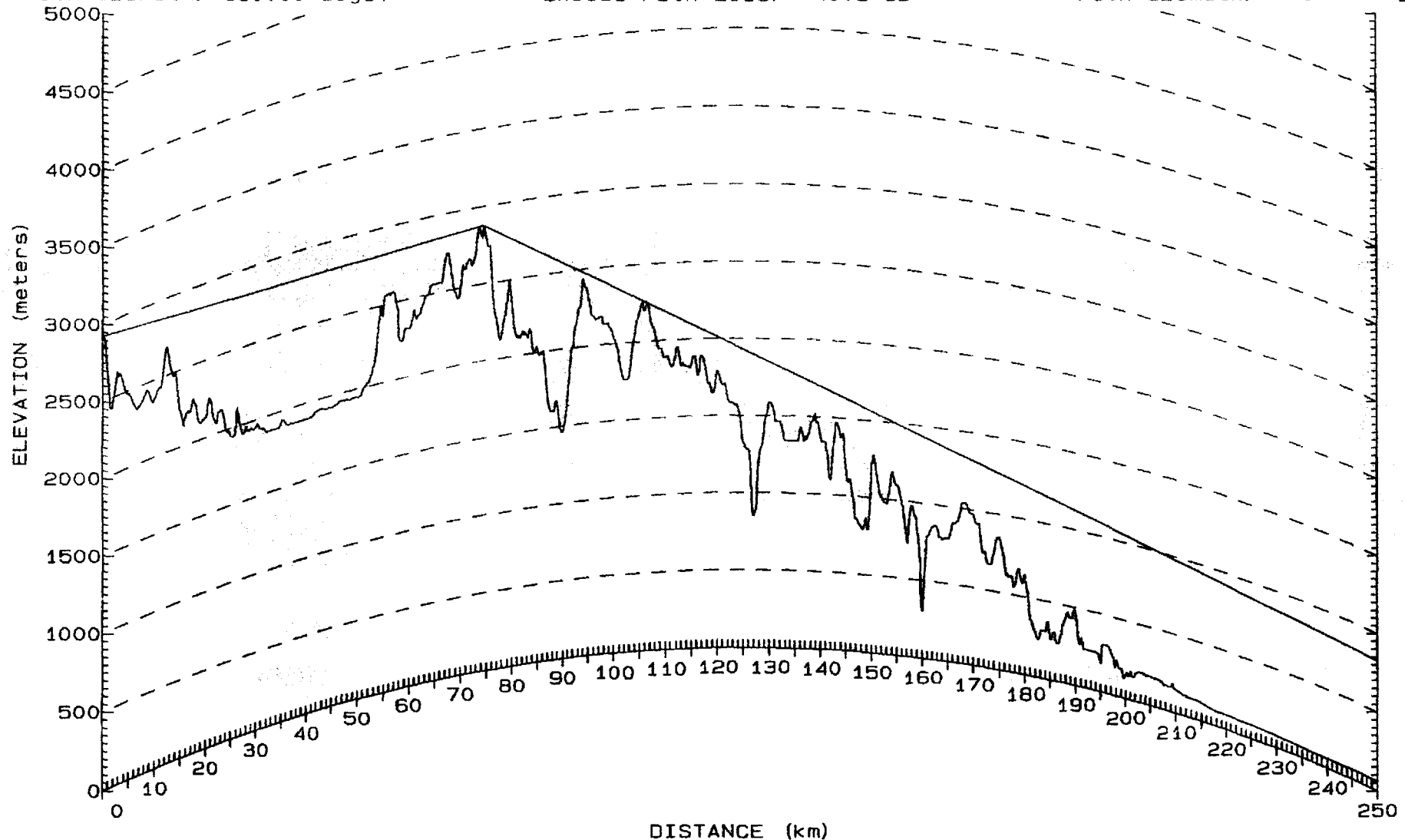
August, 1997

Exhibit 3

Site: PROPOSED CH. 9 DTV
 N 39 18 45 W 119 53 0
 Ant. Elev. (AMSL): 2925.0 m
 Path azimuth: 190.00 degs.

Frequency: 189.0 MHz
 Path Length: 250.0 km
 Total Path Loss: 166.7 dB
 Excess Path Loss: 40.8 dB

Site: 190 Degree Radial
 N 37 5 48 W 120 22 22
 Ant. Elev. (AMSL): 824.4 m
 Path azimuth: 9.70 degs.



K factor: 1.333
 Fresnel Zone: .60
 3 Second Database - WGS 72

D. L. Markley & Assoc. Inc
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Sierra Broadcasting Co.
 Reno, Nevada

CH. 9 PATH PLOT

DTV INTERFERENCE STUDY

August, 1997

Exhibit 4

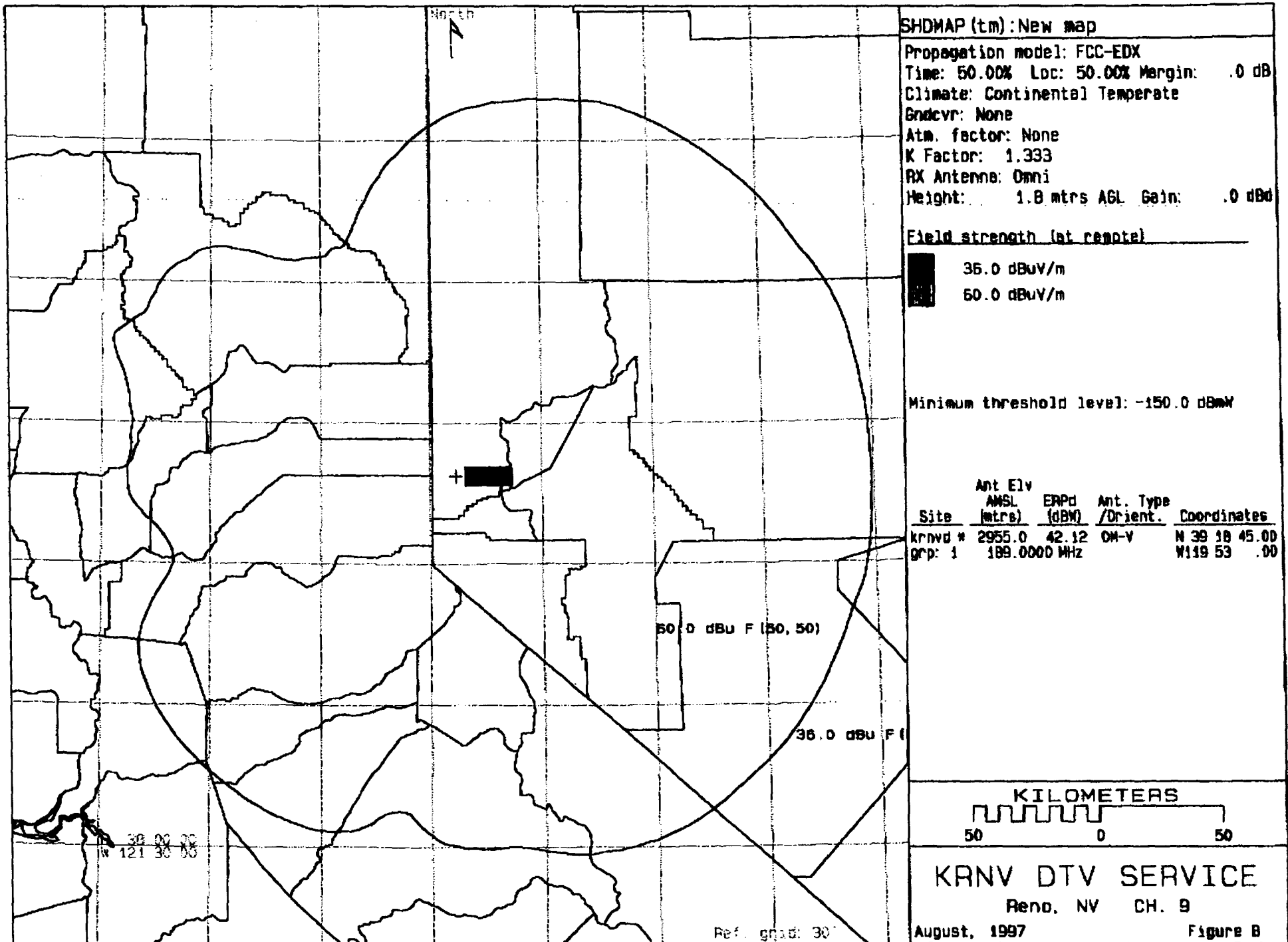
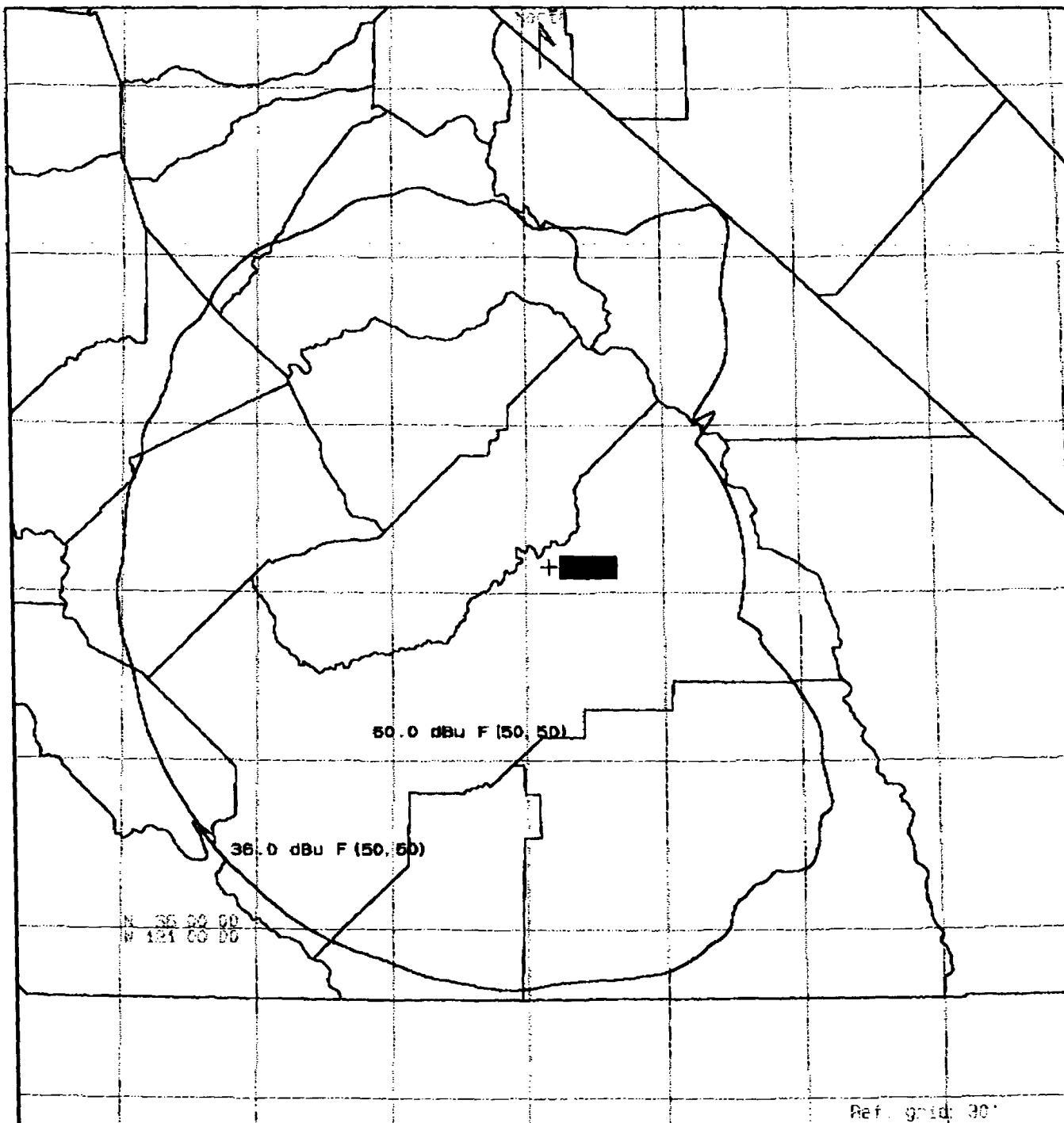


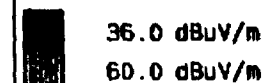
Figure B



SHOWMAP (tm): New map

Propagation model: FCC-EDX
 Time: 50.00% Loc: 50.00% Margin: .0 dB
 Climate: Continental Temperate
 Gndcvt: None
 Atm. factor: None
 K Factor: 1.333
 RX Antenna: Omni
 Height: 1.8 mtrs AGL Gain: .0 dBd

Field strength (at remote)



Minimum threshold level: -150.0 dBmW

Site	Ant Elv AMSL (mtrs)	ERPd (dBW)	Ant. Type /Orient.	Coordinates
kfsnd *	1424.1	39.19	OM-V	N 37 4 38.00
grp: 1	188.0000 MHz			W119 25 .00



KFSN-TV DTV SERVICE

Fresno, CA Ch. 9

August, 1997

Figure A

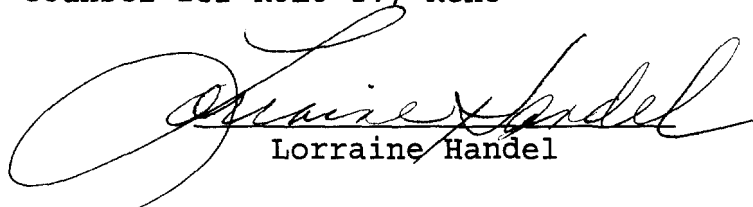
Ref. grid: 30'

Certificate of Service

I, Lorraine Handel, hereby certify that a copy of the foregoing Supplement to Petition for Reconsideration was delivered via first class, postage prepaid mail to the following this 22nd day of August, 1997.

Wilmer Cutler & Pickering
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Washington, D.C. 20037-1420
Counsel for KFSN-TV, Fresno

Haley, Bader & Potts P.L.C.
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Counsel for KOLO-TV, Reno


Lorraine Handel